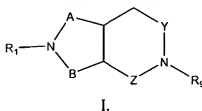


CLAIM AMENDMENTS

Claim 1. (Currently Amended) A compound of formula I



or pharmaceutically acceptable salts thereof, wherein

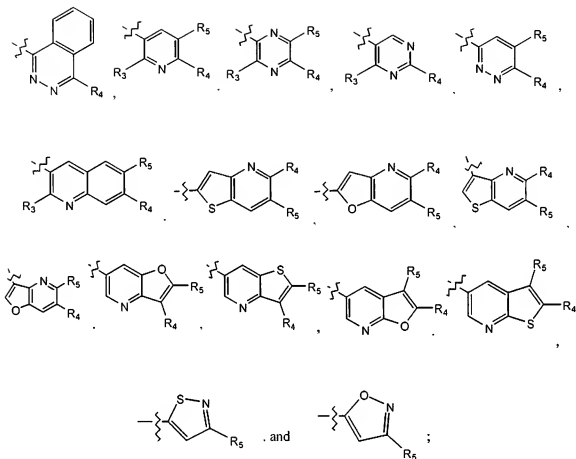
A is covalent bond:

B is CH₂CH₂;

Y is selected from the group consisting of a covalent bond, CH₂, and CH₂CH₂;

Z is selected from the group consisting of a covalent bond, CH₂, and CH₂CH₂,
provided that when Y is CH₂CH₂, then Z is a covalent bond and further provided that
when Z is CH₂CH₂, then Y is a covalent bond;

R₁ is selected from the group consisting of



R₃ is selected from the group consisting of hydrogen, alkyl, and halogen;

R₄ is selected from the group consisting of hydrogen, alkoxy, alkyl, amino, halogen, and nitro;

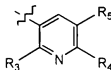
R₅ is selected from the group consisting of hydrogen, alkenyl, alkoxy, alkoxyalkoxy, alkoxyalkyl, alkoxyacetyl, alkoxyacetylalkyl, alkyl, alkylcarbonyl, alkylcarbonyloxy, alkylthio, alkynyl, amino, aminoalkyl, aminocarbonyl, aminocarbonylalkyl, aminosulfonyl, carboxy, carboxyalkyl, cyano, cyanoalkyl, formyl, formylalkyl, haloalkoxy, haloalkyl, halogen, hydroxy, hydroxyalkyl, mercapto, mercaptoalkyl, nitro, 5-tetrazolyl, -NR₆S(O)₂R₇, -C(NR₆)NR₇R₈, -CH₂C(NR₆)NR₇R₈, -C(NOR₆)R₇, -C(NCN)R₆, -C(NNR₆R₇)R₈, -S(O)₂OR₆, and -S(O)₂R₆;

R₆, R₇, and R₈ are independently selected from the group consisting of hydrogen and alkyl; and

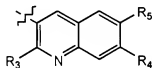
R₉ is selected from the group consisting of hydrogen, alkoxyacetyl, alkyl, amino, aminoalkyl, aminocarbonylalkyl, benzyloxyacetyl, cyanoalkyl, dihydro-3-pyridinylcarbonyl, hydroxy, hydroxyalkyl, and phenoxyacetyl.

Claim 2. (Original) A compound according to claim 1 wherein

R₁ is selected from the group consisting of



and



Claim 3. (Canceled)

Claim 4. (Canceled)

Claim 5. (Canceled)

Claim 6. (Canceled)

Claim 7. (Canceled)

Claim 8. (Canceled)

Claim 9. (Canceled)

Claim 10. (Canceled)

Claim 11. (Canceled)

Claim 12. (Canceled)

Claim 13. (Canceled)

Claim 14. (Canceled)

Claim 15. (Canceled)

Claim 16. (Previously Presented) A compound according to claim 1 of formula III



III.

or pharmaceutically acceptable salts thereof.

Claim 17. (Original) A compound according to claim 16 wherein

Y is a covalent bond and Z is a covalent bond.

Claim 18. (Original) A compound according to claim 16 wherein

Y is a covalent bond;

Z is a covalent bond; and

R₁ is



Claim 19. (Original) A compound according to claim 18 that is (1R,5R)-2-(3-pyridinyl)-2,6-diazabicyclo[3.2.0]heptane.

Claim 20. (Original) A compound according to claim 16 wherein Y is CH₂ and Z is a covalent bond.

Claim 21. (Original) A compound according to claim 16 wherein Y is a covalent bond and Z is CH₂.

Claim 22. (Original) A compound according to claim 16 wherein

Y is a covalent bond;

Z is CH₂; and

R₁ is



Claim 23. (Original) A compound according to claim 22 selected from the group consisting of

(cis)-1-(6-chloro-3-pyridinyl)octahydropyrrolo[3,4-b]pyrrole;

(cis)-1-(6-chloro-3-pyridinyl)-5-methyloctahydropyrrolo[3,4-b]pyrrole;

(3aR,6aR)-1-(6-chloro-3-pyridinyl)octahydropyrrolo[3,4-b]pyrrole;

(3aR,6aR)-1-(3-pyridinyl)octahydropyrrolo[3,4-b]pyrrole;

(3aS,6aS)-1-(6-chloro-3-pyridinyl)octahydropyrrolo[3,4-b]pyrrole;

(3aS,6aS)-1-(3-pyridinyl)octahydropyrrolo[3,4-b]pyrrole;

5-((3aR,6aR)-hexahydropyrrolo[3,4-b]pyrrol-1(2H)-yl)nicotinonitrile;
(3aS,6aS)-1-(5-hydroxy-3-pyridinyl)octahydropyrrolo[3,4-b]pyrrole; and
5-((3aS,6aS)-hexahydropyrrolo[3,4-b]pyrrol-1(2H)-yl)nicotinonitrile.

Claim 24. (Original) A compound according to claim 16 wherein Y is CH₂CH₂ and Z is a covalent bond.

Claim 25. (Original) A compound according to claim 16 wherein Y is CH₂ and Z is CH₂.

Claim 26. (Original) A compound according to claim 16 wherein Y is a covalent bond and Z is CH₂CH₂.

Claim 27. (Canceled)

Claim 28. (Canceled)

Claim 29. (Canceled)

Claim 30. (Canceled)

Claim 31. (Canceled)

Claim 32. (Canceled)

Claim 33. (Canceled)

Claim 34. (Canceled)

Claim 35. (Canceled)

Claim 36. (Canceled)

Claim 37. (Canceled)

Claim 38. (Canceled)

Claim 39. (Canceled)

Claim 40. (Canceled)

Claim 41. (Canceled)

Claim 42. (Canceled)

Claim 43. (Canceled)

Claim 44. (Canceled)

Claim 45. (Canceled)

Claim 46. (Canceled)

Claim 47. (Canceled)

Claim 48. (Canceled)

Claim 49. (Canceled)

Claim 50. (Canceled)

Claim 51. (Canceled)

Claim 52. (Canceled)

Claim 53. (Canceled)

Claim 54. (Canceled)

Claim 55. (Canceled)

Claim 56. (Canceled)

Claim 57. (Canceled)

Claim 58. (Canceled)

Claim 59. (Canceled)

Claim 60. (Canceled)

Claim 61. (Canceled)

Claim 62. (Canceled)

Claim 63. (Canceled)

Claim 64. (Canceled)

Claim 65. (Canceled)

Claim 66. (Canceled)

Claim 67. (Canceled)

Claim 68. (Canceled)

Claim 69. (Canceled)

Claim 70. (Canceled)

Claim 71. (Original) A pharmaceutical composition comprising a therapeutically effective amount of a compound of Claim 1 in combination with a pharmaceutically acceptable carrier.

Claim 72. (Canceled)

Claim 73. (Currently Amended) A method of treating a disorder in a mammal in need of such treatment, comprising administering a therapeutically effective amount of a compound of Claim 1, wherein the disorder is selected from the group consisting of Alzheimer's disease, Parkinson's disease, memory dysfunction, Tourette's syndrome, sleep disorders, attention deficit hyperactivity disorder, ~~neurodegeneration, inflammation, neuroprotection,~~ amyotrophic lateral sclerosis, anxiety depression, mania, schizophrenia, eating disorders, AIDS-induced dementia, epilepsy, urinary incontinence, Crohn's disease, migraines, pain, PMS, erectile dysfunction, ~~substance abuse,~~ smoking cessation, and inflammatory bowel syndrome.

Claim 74. (Currently Amended) A method of treating a disorder in a mammal in need of such treatment, comprising administering a therapeutically effective amount of a compound of Claim 1. ~~The method of claim 73~~ wherein the disorder is selected from the group consisting of Alzheimer's disease, Parkinson's disease, attention deficit hyperactivity disorder, depression, nicotine withdrawal syndrome, Tourette's syndrome, and schizophrenia.

Claim 75. (Currently Amended) A method of treating a disorder in a mammal in need of such treatment, comprising administering a therapeutically effective amount of a compound of Claim 1. ~~The method of claim 73~~ wherein the disorder is pain.

Claim 76. (Canceled)

Claim 77. (Canceled)

Claim 78. (Canceled)

Claim 79. (Canceled)

Claim 80. (Previously Presented) A compound that is (3aR,6aR)-1-(3-pyridinyl)octahydropyrrolo[3,4-b]pyrrole or a salt thereof.

Claim 81. (Previously Presented) A pharmaceutical composition comprising a therapeutically effective amount of a compound of (3aR,6aR)-1-(3-pyridinyl)octahydropyrrolo[3,4-b]pyrrole in combination with a pharmaceutically acceptable carrier.

Claim 82. (Currently Amended) A method of treating a disorder in a mammal in need of such treatment, comprising administering a therapeutically effective amount of (3aR,6aR)-1-(3-pyridinyl)octahydropyrrolo[3,4-b]pyrrole, wherein the disorder is selected from the group consisting of Alzheimer's disease, Parkinson's disease, memory dysfunction, Tourette's syndrome, sleep disorders, attention deficit hyperactivity disorder, ~~neurodegeneration, inflammation, neuroprotection,~~ amyotrophic lateral sclerosis, anxiety depression, mania, schizophrenia, eating disorders, AIDS-induced dementia, epilepsy, urinary incontinence, Crohn's disease, migraines, pain, PMS, erectile dysfunction, ~~substance abuse,~~ smoking cessation, and inflammatory bowel syndrome,